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ABSTRACT

Informal communication is an integral part of a university. It is therefore necessary to understand its future role in any restructuring of the university caused by attempts to improve its information systems. Two approaches are proposed to facilitate a clarification of this future role. The first consists of a series of queries designed to define the current role played by information communication in a university. The second approach extracts implications from the literature about the constituent elements of information channels and the characteristics of informal communication as a whole. It is concluded that (1) the benefits of informal communication lie basically in its individualized nature; (2) the results of informal interaction may be duplicated by formal means; but (3) it might not be possible to predict the success of these means; and (4) future research must be done on the incentives for choosing informal means so that success of the formal channels may be more easily determined. (Author)

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INFORMAL COMMUNICATION IN AN ACADEMIC COMMUNITY

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Abstract

Informal communication is an integral part of a university. It is therefore necessary to understand its future role in any restructuring of the university caused by attempts to improve its information systems. Two approaches are proposed to facilitate a clarification of this future role. The first consists of a series of queries designed to define the current role played by informal communication in a university. The second approach extracts implications from the literature about the constituent elements of informal channels and the characteristics of informal communication as a whole. The possible effects of change on informal channels are discussed and it is concluded that (i) the benefits of informal communication lie basically in its individualized nature; (ii) the results of informal interaction may be duplicated by formal means; but (iii) it might not be possible to predict the success of these means; and (iv) further research must be done on the incentives for choosing informal means so that success of the formal channels may be more easily determined.

INTRODUCTION

Informal communication has come to be recognized as an important ingredient in many information systems. Discussions of invisible colleges by Crane and Price (3,12) concern themselves primarily with informal channels of communication. Studies of information needs and uses have discovered the current or potential importance of informal communication. It was with these observations in mind that Project INFUT (INFormation UTility) included informal information sources as one of four interacting components comprising a university information system (the other three being formal sources, users and management). For a discussion of the project as a whole, see Saracevic et al. (14).

Definitions

To eliminate any confusion about the use of the term "informal", we establish the following definitions. Informal sources may consist of either printed information or knowledgeable individuals. Thus, "tangible" informal sources include any printed materials (books, journals, reprints, etc.) which are privately held and not subject to any university policies, regulations or controls. Private collections of faculty members, which are prime examples of tangible informal sources, are the subject of a study by Fallon et al. (4). "Intangible" informal sources are people with whom written and verbal communications are exchanged. Discussions of invisible colleges, informal communications and informal channels of communication fall within this area of intangible informal sources.

Overview

Before Project INFUT can make suggestions for the improvement of university information systems, it must consider the beneficial and detrimental aspects of the existing systems and the potential effects of change on these systems. We will concern ourselves here with a definition of the role which informal communication should play in any restructuring of the current information system.

To develop such a definition requires that the current role of informal communication in a university be understood. Questions of frequency (how much informal communication activity takes place), reason for participation, results of communication and the forms of such activity must be answered.

Based on the answers to these questions and further clues provided in the literature, the future role of informal communication in a university may be anticipated.

FUTURE ROLE OF INFORMAL COMMUNICATION

To define the future role of informal communication, we will first look at its constituent elements and then consider its characteristics as a whole.

Elements of Informal Communication

The variables in informal communication are the information source, the destination and the channel. "Intangible" informal sources (hereafter referred to as simply informal sources) and destinations within the university include faculty members and students. The same people may be either information disseminators or users. The channel refers to informal, person-to-person modes of communication like correspondence, visits, and corridor conversations. The goals of the sources and destinations involve both their own immediate needs and the "long range" goals of the university.

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Universities, in general, perform two activities: education and research. In a simplistic way, education is a process wherein the faculty communicates collections of information to students in a planned, orderly fashion. Research is the process of generating new information. A primary source of information for the educational process at the university is the teacher. The faculty member is responsible for planning courses, selecting texts, presenting lectures, and evaluating student performance (assigning grades, etc.). The faculty member is also a primary source of information for research. Immediate needs of the faculty member would then include: (i) keeping abreast of happenings in his areas of interest; (ii) finding immediate and specific answers to research questions; (iii) conducting extensive background searches at the outset of a research project; (iv) reviewing information relevant to a specific field and (v) stimulation for new ideas to be used in both teaching and research. The student involved in coursework and/or research would have similar immediate needs.

To evaluate the role of informal communication in fulfilling the immediate needs of faculty and students, we must look at the interaction between information sources and destinations - the process of interaction as well as the causes and results.

Causes of Interaction

Several contradictory opinions appear in the literature regarding the reason why informal communication channels are created. A common initial assumption is that these informal channels are needed to satisfy information needs not fulfilled by formal channels (Garvey and Griffith, 5). Griffith and Miller (5) suggest that the most highly organized and coherent information exchange groups do not form primarily as a mechanism to meet communication needs but to reduce the range of information that is regarded as relevant by group members. These points suggest that a faculty member or student will seek an interactive forum when he requires information which the formal channels cannot supply or when the formal channels supply so much information that a screening mechanism is needed. An example of the first case would be a situation in which a faculty member doing research needs some information about a special technique which does not appear in the literature. The second case can be illustrated by the faculty member who simply cannot keep up with all relevant information in his subject area. He needs to rely on his colleagues for current awareness in certain peripheral areas.

A third point, which should be mentioned with regard to the causes of interaction, provides some important advice for information system designers. It has been stated that information needs, and motivations for using informal channels, depend on several personal and environmental factors: the stage of research (whether developing theoretical ideas, methodology and techniques, or results and data); the age, nationality and educational background of the researcher; and the subject area and work environment (American Psychological Association,1). Yet Line reports in his overview of INFROSS (8) that the use of informal channels appears to be unrelated to status, age, discipline and even to extent of use of formal systems. A further inconsistency exists in that a good deal of the findings of INFROSS, as indeed of other user studies, seem to point strongly to the need for personal intermediaries (information officers). Menzel (12),however, found that basic researchers whom he interviewed were reluctant to rely upon summaries and did much reading of actual articles. Personal and environmental factors have some effect on the decision to use informal communication channels, but no accurate predictions can be made on the basis of these two factors alone. Line (8) suggests that simply the informality of informal communications make them attractive. Further research is needed to determine what prompts usage of informal channels.

Process of Interaction

The process of interaction initially involves the choice of an information source. Menzel (12) found that the most appropriate source for a specific information need was often chosen fortuitously. Often several channels had to be utilized before a suitable source was reached (Menzel, 11). It seems that the interaction of channels also occurred mostly by chance. This would indicate a need, as Menzel proposes, to consider information networks as systems. Then a piece of information which was accidentally acquired by an individual could be passed on to those with the appropriate interests. The chance nature of channel interactions could be put to use.

Hagstrom (7) suggests that interaction between individuals is a function of the distance between them and the number of personal links that might join them. He observed that most university scientists communicate more with their departmental colleagues than others, and they are often introduced to the work of scientists in other institutions by their departmental colleagues. Thus consultantships, secondary appointments at other institutions, and committee services should be encouraged to facilitate information exchange.

The fact remains that the process of interaction in informal communication is poorly understood. Successful interaction often occurs simply by chance. If attempts were made to facilitate interactions among individuals would informal communication continue to be attractive? If it is true that informality is really the appealing feature, then the answer is a negative one. Further investigation in this area would help to clarify those aspects of informal communication which are most appealing.

Results of Interaction

The results of informal communication were found by Line (8) to be (i) locating relevant references, (ii) keeping abreast of new publi-

cations and (iii) keeping up with current research. In addition, faculty members use informal channels for answers to reference questions, stimulation for new ideas and information filtering. The student utilizes informal channels for similar functions. Thus informal communication fulfills all but the extensive search need mentioned earlier.

The foregoing section of the paper has enumerated the elements involved in informal communication. What follows is a treatment of the subject as a whole.

Characteristics of Informal Communication

The characteristics of informal communication have been well stated in the report by the Committee on Scientific and Technical Communication (2) and will only be briefly mentioned here:

1. It is interactive.
2. It provides prompt reinforcing and critical feedback.
3. It fits the specific and immediate needs of the user.
4. It covers an extensive subject range.
5. It requires a small expenditure of time and effort.
6. It is open-ended. Research failures as well as successes may be discussed.
7. It transmits current information.

In addition to these attributes of informal communication, there are several disadvantages. Considerable redundancy exists in an informal system and information is stored only temporarily. Information is often difficult to retrieve. The American Psychological Association study (1) highlighted several other inconveniences involved in informal communication. Subjects reported avoiding informal channels to prevent the piracy of ideas and to avoid the possibility of wasting time. Some disliked describing any necessary technical background which a potential information source might lack. The individualized nature of informal communication accounts for the major disadvantage to which an allusion was made earlier: It is "inefficient and often poorly focused, if not haphazard" (Menzel, 10).

Formal communication solves the problems of information being difficult to retrieve and stored only temporarily. The inefficiency and haphazard nature of informal communication may be similarly expedited by formal mechanisms if, as Menzel (10) states, favorable circumstances are present (i.e., the existence of the necessary hardware and software and large and sophisticated publics). Redundancy may in some cases be considered an asset since it provides reformulations of information which may serve the varied needs of different individuals. Thus informal communication has several disadvantages which may at times be considered advantages. The experiences of each user determine whether an informal channel is considered beneficial.

Effect of Change

Is it possible to change or eliminate informal communication and maintain as serviceable an information system? The literature (Menzel, 10) discusses several formal analogues for informal channels which are attempts to reach larger groups of people in an organized fashion.

Preprint exchanges alleviate the problems of slow publication rates. Selective switching can be performed by SDI services. However, as reported earlier, basic scientists are reluctant to allow other people to do their scanning for them. Screening, evaluation and synthesis of information are being performed by information analysis centers. In the university environment, programmed instruction and cathode ray tubes provide instantaneous feedback and transmission of information which could only be "shown" previously. The likelihood of "lucky accidents" can be increased by the publication of directories and newsletters and the encouragement of interaction of department members with other colleagues.

Factors which directly affect the success of these formal analogues are: the nature of the specific discipline, its content and structure, the extent to which faculty members are willing and expected to share information with one another and with students, and the rate of change in a specialty. Experimentation in this vein will continue, since the demands placed on informal systems by large groups of people are often manageable only in a more formal channel.

CONCLUDING REMARKS

The individualized nature of informal communication is basic. Although formal analogues for informal channels exists, their success ultimately depends on the needs and whims of individuals. To predict the future role of informal communication requires a more thorough understanding of the incentives for choosing informal interaction in preference to the more formal types. Thus although formal analogues may be created to satisfy the goals of information sources and destinations, and to provide the benefits of informal channels, it might be only the informal nature which is responsible for the success of informal communication. Such a possibility must be investigated before the future role of informal channels can be ascertained.

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